

Amendments to the Claims:

Claims 1-23. (Cancelled)

24. (Currently Amended) A method for precise working of material, particularly organic tissue, comprising the step of providing laser pulses with a pulse length between 50 fs and 1 ps and with a pulse frequency from 50 kHz to 1 MHz and with a wavelength between 600 and 2000 nm for acting on the material to be worked,

wherein the laser pulses are focused on or in the material and the focal points are guided in three dimensions,

and the focus points are guided in such a way that a substantially cohesive cut surface is generated in the material.

25. (Previously Presented) The method for precise working of material according to claim 24, wherein the energy of the individual pulses is between 100 nJ and 5 μ J.

26. (Cancelled)

27. (Cancelled)

28. (Currently Amended). The method for precise working of material according to claim 24 27, wherein a second cut surface is generated in the material and, together with ~~the~~ a first cut surface, surrounds an essentially lens-shaped portion of material.

29. (Previously Presented) The method for precise working of material according to claim 28, wherein additional cut surfaces are generated in the severed portion of material.

30. (Cancelled)

31. (Currently Amended) The method for precise working of material according to claim 28 ~~in combination with claim 30~~, wherein the at least one portion of material is extracted from the material through the at least one cut.

32. (Currently Amended) The method for precise working of material according to claim ~~24~~ 26, wherein the time interval between the laser pulses is varied depending upon the location of the focus point.

33. (Currently Amended) The method for precise working of material according to claim ~~24~~ 26, wherein the speed at which the focus points are guided is varied depending upon the location of the focus points.

34. (Currently Amended) Apparatus for precise working of material, particularly organic tissue, comprising a pulsed laser, wherein the laser has a pulse length between 50 fs and 1 ps and with a pulse frequency of 50 kHz to 1 MHz,

wherein the energy of the individual laser pulses is between 100 nJ and 5 μ J,
and beam devices for beam shaping and/or beam control and/or beam deflection
and/or beam focusing are further provided.

35. (Cancelled)

36. (Cancelled)

37. (Previously Presented) The apparatus for precise working of material according to claim 34, wherein the beam devices are programmable.

38. (Previously Presented) The apparatus for precise working of material according to claim 34, wherein holding devices are further provided for positioning and/or fixating the material to be worked.

39. (Previously Presented) The apparatus for precise working of material according to claim 34, wherein a work beam of the radiation source can be applied to the material or in the material by means of the beam devices in geometrically predefinable shapes in a time sequence that can be predetermined.

40. (Currently Amended) The apparatus for precise working of material according to claim 39, wherein the pulsed work beam can be applied to the material by ~~the beam deflection~~ a beam scanning device, during which time the repetition rate can be modified.

41. (Previously Presented) The apparatus for precise working of material according to claim 34, wherein the laser is a fiber laser.

42. (Previously Presented) The apparatus for precise working of material according to claim 34, wherein the laser is a disk laser.

43. (Previously Presented) The apparatus for precise working of material according to claim 34, wherein the laser is a combination of fiber laser oscillator and disk laser amplifier.

44. (Currently Amended) The method for precise working of material according to claim ~~31~~ 30, wherein the length of the cut between the material surface and the material portion along the material surface is appreciably smaller than the circumference of the material portion.

45. (Previously Presented) The method for precise working of material according to claim 31, wherein the material portion is divided into small fragments and the extraction of these fragments is carried out by means of a suction/rinsing device.

46. (Currently Amended) A method of using said apparatus according to claims 34 comprising the step of using said apparatus for refractive surgery.